

Comparisons of Job Characteristics

Focus Occupation: [Natural Sciences Managers \(11-9121\)](#)

Associated Occupation: [Environmental Science and Protection Technicians, Including Health \(19-4091\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 80

Focus Occupation: Natural Sciences Managers (11-9121)

Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Computers and Electronics	8.4	13.6	10.4	<< Extensive education and/or training may be required
Chemistry	4.8	13.2	13.5	0 Current knowledge level may be sufficient
Biology	3.7	11.4	11.8	0 Current knowledge level may be sufficient
Public Safety and Security	6.9	11.1	6.6	<< Extensive education and/or training may be required
Physics	4.3	9.9	7.1	<< Extensive education and/or training may be required
Law and Government	5.9	9.8	12.1	> Current knowledge level is likely sufficient
Geography	3.9	9.7	5.9	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 71

Focus Occupation: Natural Sciences Managers (11-9121)

Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Science	4.5	10.3	15.7	>> Skill level is likely more than sufficient
Mathematics	6.2	9.2	10.6	> Skill level is likely sufficient
Operations Analysis	5.0	7.9	13.6	>> Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 89			
Focus Occupation: Natural Sciences Managers (11-9121)					
Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Expression	9.8	12.9	14.4	>	Current ability level is likely sufficient
Near Vision	11.1	12.8	12.2	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	9.1	9.8	0	Current ability level may be sufficient
Number Facility	6.3	9.0	10.0	>	Current ability level is likely sufficient
Rate Control	3.8	6.7	1.0	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 62
Focus Occupation: Natural Sciences Managers (11-9121) Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Advise clients or customers	19	
Analyze scientific research data or investigative findings	27	
Communicate technical information	4	
Confer with scientists	54	
Develop plans for programs or projects	31	
Develop policies, procedures, methods, or standards	21	
Explain complex mathematical information	30	
Prepare reports	8	
Use physical science research techniques	68	
Use scientific research methodology	21	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common	Similarity of Focus Occupation to Associated Occupation: 76
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Focus Occupation: Natural Sciences Managers (11-9121)**Associated Occupation: Environmental Science and Protection Technicians, Including Health (19-4091)**

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Gas analyzers and monitors	10
Hydrological instruments	31
Industry specific software	1
Information exchange software	1
Liquid and solid and elemental analyzers	19
Meteorological instruments	16
Network applications software	1
Sampling equipment	12
Soil measuring equipment	20
Viewing and observing instruments and accessories	4
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.